

LISTING OF THE CLAIMS

1 (currently amended): A high-strength hot-dip galvanized steel sheet characterized by: containing, in weight,

C: 0.03 to 0.25%,

Si: 0.05 to 2.0%,

Mn: 0.5 to 2.5%,

P: 0.03% or less,

S: 0.02% or less, and

Al: 0.01 to 2.0%, and

Ni: 0.01 to 2.0%

balance Fe and unavoidable impurities;

with the relationship among Si, Mn and Al and the relationship among Si, Al and Ni satisfying the following expression,

$Si + Al + Mn \geq 1.0\%$;

$0.4 (\%) \leq Si (\%) + Al (\%) \leq 2.0 (\%)$;

$Ni (\%) \geq 1/5 \times Si (\%) + 1/10 \times Al (\%)$;

and said steel sheet contains retained austenite in the range from 2 to 20 %;

a hot-dip plating layer being formed on each of the surfaces of said steel sheet; and

5 to 80% of the surface area of said steel sheet being occupied by Si, Mn and Al oxides when said steel sheet surface is observed with a scanning electron microscope after a hot-dip plating layer is dissolved by fuming nitric acid;

wherein said surface area of said steel sheet occupied by said Si, Mn and Al oxides is on the surfaces of said steel sheet interfacing with said hot-dip plating layer prior to said hot-dip plating layer being dissolved by said fuming nitric acid; and

wherein said Si, Mn and Al oxides have a maximum length of 3 μ m
and said Si, Mn and Al oxides have gaps between them.

Claims 2 to 26: (canceled).

27 (new): A high-strength hot-dip galvanized steel sheet according to claim 1, characterized by further containing, in weight, one or both of

Cr: 0.01 to 0.5% and

Mo: 0.01 to 0.5%,

with the relationship between Ni and Mo satisfying the following expression,

$$1/20 \times \text{Ni} (\%) \leq \text{Mo} (\%) \leq 10 \times \text{Ni} (\%).$$

28 (new): A high-strength hot-dip galvanized steel sheet according to claim 1 to 27, characterized by further containing, in weight, one or both of

Cu: 0.01 to 1.0% and

Sn: 0.01 to 0.10%,

with the relationship among Ni, Cu and Sn and the relationship among Si, Al, Ni, Cu and Sn satisfying the following expressions,

$$2 \times \text{Ni} (\%) > \text{Cu} (\%) + 3 \times \text{Sn} (\%),$$

$$\text{Ni} (\%) + \text{Cu} (\%) + 3 \times \text{Sn} (\%) \geq 1/5 \times \text{Si} (\%) + 1/10 \times \text{Al} (\%).$$

29 (new): A high-strength hot-dip galvanized steel sheet according to claim 1 or 27, characterized by further containing, in weight, one or more of: V: less than 0.3%, Ti: less than 0.06%, Nb: less than 0.06%, B: less than 0.01%, REM: less than 0.05%, Ca: less than 0.05%, Zr: less than 0.05%, and Mg: less than 0.05%.

30 (new): A high-strength hot-dip galvanized steel sheet according to claim 28, characterized by further containing, in weight, one or more of: V: less than 0.3%, Ti:

less than 0.06%, Nb: less than 0.06%, B: less than 0.01%, REM: less than 0.05%, Ca: less than 0.05%, Zr: less than 0.05%, and Mg: less than 0.05%.